

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. - 15. (cancelled)

16. (previously presented) A method for handoff of a wireless terminal from a first access point (AP) associated with a first access router (AR) in a first extended service set (ESS) to a second AP associated with a second AR in a second ESS, comprising:

the terminal, responsive to the loss of a connection with the first AP, scanning for another connection, finding the second AP, retrieving information from the second AP, determining that the second AP is different from the first AP;

the terminal transmitting a reassociation message to the second AP;

the second AP receiving the reassociation message from the terminal and sending to the terminal a reassociation success message;

the terminal, after the receipt of the reassociation success message, initiating a handoff procedure comprising:

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the terminal providing to the second AP information regarding the first AR, which the second AP then provides to the second AR;

the second AR, responsive to receiving the information regarding the first AR from the second AP, contacting the first AR;

the first AR, responsive to being contacted by the second AR, rerouting traffic for the terminal to the second AR; and

the second AR reestablishing a session between the terminal and the second AP.

17. (previously presented) The method of claim 16, the transmitting the reassociation message step further comprising the reassociation message including identifiers of the first AP, the second AP and the first ESS.

18. (previously presented) The method of claim 17, after the transmitting the reassociation message step, further comprising:

a distribution system in the second ESS failing to recognize the first AP;

the reassociation success message indicating to the terminal that the first AP was not recognized; and

the terminal initiating the handoff procedure in response to receiving the reassociation success message.

19. (previously presented) The method of claim 16, the step of rerouting traffic for the terminal to the second AR further comprising the first AR releasing resources in the first ESS that had been used by the terminal and/or reserved for the use of the terminal.

20. (previously presented) A method for handoff of a wireless terminal from a first access point (AP) associated with a first access router (AR) in a first extended service set (ESS) to a second AP associated with a second AR in a second ESS, comprising:

said terminal, responsive to the loss of a connection with the first AP, scanning for another connection, finding the second AP, retrieving information from the second AP, determining that the second AP is different from the first AP, and transmitting a reassociation message to the second AP;

the second AP receiving the reassociation message from the terminal and authenticating and authorizing the terminal;

the second AP sending to the terminal a reassociation success message;

the second AP initiating a handoff procedure comprising:

the second AP querying a database in the first ESS to retrieve an address of the first AR, and providing the address of the first AR to the second AR;

the second AR, responsive to receiving the address of the first AR from the second AP, contacting the first AR;

the first AR, responsive to being contacted by the second AR, rerouting traffic for the terminal to the second AR; and

the second AR reestablishing a session between the terminal and the second AP.

21. (previously presented) The method of claim 20, the transmitting the reassociation message step further comprising the reassociation message including identifiers of the first AP, the second AP and the first ESS.

22. (previously presented) The method of claim 21, after the transmitting the reassociation message step, further comprising:

a distribution system (DS) in the second ESS failing to recognize the first AP;
and

the second AP initiating the handoff procedure in response to the DS in the second ESS failing to recognize the first AP.

23. (previously presented) The method of claim 20, the step of rerouting traffic for the terminal to the second AR further comprising the first AR releasing

resources in the first ESS that had been used by the terminal and/or reserved for the use of the terminal.

24. (previously presented) A method for handoff of a wireless terminal from a first access point (AP) associated with a first access router (AR) in a first extended service set (ESS) to a second AP associated with a second AR in a second ESS, comprising:

said terminal, responsive to the loss of a connection with the first AP, scanning for another connection, finding the second AP, retrieving information from the second AP, determining that the second AP is different from the first AP, and transmitting a reassociation message to the second AP;

the second AP receiving the reassociation message from the terminal and authenticating and authorizing the terminal;

the second AP initiating a handoff procedure comprising:

the second AP querying the terminal to retrieve an address of the first AR, and providing the address of the first AR to the second AR;

the second AR, responsive to receiving the address of the first AR from the second AP, contacting the first AR;

the first AR, responsive to being contacted by the second AR, rerouting traffic for the terminal to the second AR; and

the second AR reestablishing a session between the terminal and the second AP; and

the second AP sending to the terminal a reassociation success message.

25. (previously presented) The method of claim 24, the transmitting the reassociation message step further comprising the reassociation message including identifiers of the first AP, the second AP and the first ESS.

26. (previously presented) The method of claim 25, after the transmitting the reassociation message step, further comprising:

a distribution system (DS) in the second ESS failing to recognize the first AP;
and

the second AP initiating the handoff procedure in response to the DS in the second ESS failing to recognize the first AP.

27. (previously presented) The method of claim 24, the step of rerouting traffic for the terminal to the second AR further comprising the first AR releasing resources in the first ESS that had been used by the terminal and/or reserved for the use of the terminal.

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28. (previously presented) A wireless terminal for use in a wireless network, able to handover a communication from a first access point (AP) associated with a first access router (AR) in a first extended service set (ESS) to a second AP associated with a second AR in a second ESS, the wireless terminal comprising:

in response to losing a connection with the first AP, a device for forming a reassociation message which includes an identity of the first AP, the second AP and the first ESS; and

a transmitter for sending the reassociation message to the second AP.

29. (previously presented) The wireless terminal of claim 28, further configured to initiate procedures to handover the communication from the first AP to the second AP.

30. (new) A wireless transmit/receive unit (WTRU) for use in a wireless communication network having a plurality of extended service sets (ESS), each ESS have at least one access point (AP) and at least one access router (AR), the WTRU comprising:

a processor configured to detect the loss of a connection from a first AP in a first ESS, and to generate a reassociation message including information concerning a first AR associated with the first AP and first ESS; and

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a transceiver for transmitting the reassociation message to the second AP in the second ESS, and for receiving a reassociation success message from the second AP;

wherein the processor is configured to initiate a hand over to the second AP associated with the second ESS upon receipt of the reassociation success message.